REMARKS

Claims 1-7, 9-26, and 28-38 are pending, and again all stand rejected. Independent claims 1, 18, and 33 are again rejected as being obvious under 35 U.S.C. 103(a) from *Wang* (U.S. Patent No. 5,918,184). New claims 39-42 are now added, they introduce no new matter, and are similar to the existing claims. The Office Action states at page 2, section 3 as follows:

> "Wang reference clearly teaches that both the communication channel and the alternative communication channel are for communication between the mobile device and the base station (see column 5 and lines 52-64)."

However, the Applicant respectfully disagrees. *Wang* says the following at column 5, lines 61-64:

> "The call from the mobile terminal **46** is then handed off to the base station that measures the highest SAT signal power to SAT noise power ratio."

Thus, *Wang* is describing a handover from one base station to another base station. Present claim 1 only claims one base station, and claims a handover from one channel to another channel that ***both*** reach that base station. *Wang* does not teach or suggest any handover except a handover between different base stations.

Applicant respectfully emphasizes that page 5, lines 4-5 of the present application explain that the invention can be used for handover to a different frequency with the ***same*** base station. *Wang* only discusses handover between different base stations, and the invention of *Wang* is completely inapplicable and impractical unless more than one base station communicates with the mobile station.

Regarding column 2 of *Wang*, lines 45-52, it is there stated that if a base station measures a ratio that drops below a threshold, then at least one neighboring base station (in the neighborhood of the first base station) measures the ratio. This aspect of *Wang* is different from the present invention, which says that a handover occurs "without any need ... to visit,

monitor, or directly measure the adjacent channel being used by another base station" (page 4, lines 17-18). So, it should be clear that these are two very different inventions, and a primary advantage of the present claimed invention is that it avoids the unnecessary measurements that occur in *Wang*.

Brief Summary of the Invention

In a wireless telephone system, a mobile user will frequently move from one cell to another. Suppose the mobile user is communicating via a first base station, and there is a nearby second base station that uses an adjacent frequency which is interfering with the communication between the user and the first base station. The second base station is part of a separate network, so the user does not have the option of switching over to the second base station. The present invention provides an improved way for the mobile phone to decide when to perform an interfrequency handover (HO) to another frequency, so that the user can continue to communicate via the first base station, but without suffering from the adjacent frequency interference from the second base station. This HO decision is made by measuring the relationship between adjacent channel power and the user's own channel power. According to the present claimed invention, this measurement is accomplished indirectly, by comparing the power before and after processing by a digital pulse shaping filter.

Dependent Claims 6 and 25

Applicant would also like to again respectfully assert that the rejections of dependent claims 6 and 25 in the final Office Action did not point to features in *Wang* that are comparable. Claims 6 and 25 are addressed at the second paragraph on page 7 of the present Office Action, and at the second full paragraph on page 6 of the previous Office Action, and those two paragraphs are identical to each other. In other words, Applicant does not perceive that the present Office Action has responded to the section of Applicant's October 12, 2004 response titled "Dependent Claims 6 and 25."

Both Office Actions refer to figure 4 of *Wang*, and also to column 5, lines 35-64 of *Wang*. However, Applicant has carefully studied these portions of *Wang*, and cannot find similar features.

In the present application, the paragraph beginning at line 29 on page 7 discusses this feature of the present claimed invention. This feature involves adjacent frequency channels that are different from similar sets of adjacent channels associated with other base stations. The feature is illustrated in figure 4 of the present application, and is only applicable where the handover is an interfrequency handover that maintains communication with the same base station. *Wang* does not teach or suggest any handover except a handover from one base station to another, and therefore the feature of claims 6 and 25 would be of no use in the context of *Wang*. The purpose of the features claimed in claims 6 and 25 is to allow a mobile unit to keep communicating with a base station, but using an alternative channel that is adjacent to the communication channel originally used. Thus, if there is interference coming from one end of the adjacent channels, then the mobile station can shift toward the other end.

Of course, the allowability of the present independent claims should render all of the claims allowable, and therefore it is not really necessary to argue separately for the allowability of claims 6 and 25. Nevertheless, Applicant emphasizes that *Wang* does not render claims 6 or 25 obvious, even if the present independent claims were not allowable.

CONCLUSION

Because the cited *Wang* reference does not teach or suggest critical elements of the present independent claims 1, 18, and 33, it is respectfully submitted that the present claims are novel and patentable. Early allowance of claims 1-38 is earnestly solicited. Applicant would be grateful if the Examiner would please contact Applicant's attorney by telephone if the Examiner detects anything in the present response that might hinder a speedy allowance.

Respectfully submitted,

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Andrew T. Hyman
Attorney for Applicant
Registration No. 45,858

WARE, FRESSOLA, VAN DER
SLUYS & ADOLPHSON LLP
Building Five, Bradford Green
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
USPTO Customer No. 004955